

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of:  
Sammy M. Chau et al.

Application No.: 10/825,089

Confirmation No.: 7160

Filed: April 15, 2004

Art Unit: 2617

For: INTELLIGENT WIRELESS SWITCH (IWS)  
AND INTELLIGENT RADIO COVERAGE  
(IRC) FOR MOBILE APPLICATIONS

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Examiner: M. G. Manoharan

**REPLY BRIEF**

MS Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

As required under § 41.41(a)(1), this Reply Brief is filed within two months of the Examiner's Answer dated December 23, 2008, and is in furtherance of the Appeal Brief filed on October 21, 2008.

No fee is required for this REPLY BRIEF.

This brief contains items under the following headings pursuant to M.P.E.P. § 1208:

- I. Status of Claims
- II Ground of Rejection to be Reviewed on Appeal
- III. Argument
- IV Conclusion

**I. STATUS OF CLAIMS**

The status of claims remains as identified in the Appeal Brief submitted October 21, 2008 which is as follows:

A. Total Number of Claims in Application

There are 18 claims pending in application.

B. Current Status of Claims

1. Claims canceled: None
2. Claims withdrawn from consideration but not canceled: None
3. Claims pending: 1 – 18
4. Claims allowed: None
5. Claims rejected: 1 – 18

C. Claims On Appeal

The claims on appeal are claims 1 – 18.

II. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to be reviewed remain as identified in the Appeal Brief submitted October 21, 2008, which are as follows:

- A. Claims 1, 2, 3, 8, 9, 11, 13 and 18 are rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent 5,867,785 (filed Jan. 31, 1996, issued Feb. 2, 1999) to Averbuch et al (hereinafter “Averbuch”) in view of U.S. Patent application publication 2004/0058678 (filed Sep. 23, 2002) by deTorbal. (hereinafter “deTorbal”).
- B. Claims 4, 10 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Averbuch in view of deTorbal and further in view of U.S. Patent 5,268,933 (filed Sep. 27, 1991, issued Dec. 7, 1993) to Averbuch (hereinafter “Averbuch-2”).

- C. Claims 5 and 6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Averbuch in view of deTorbal and further in view of U.S. Patent application publication 2003/0153316 (filed Feb. 12, 2002) by Noll et al. (hereinafter “Noll”).
- D. Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Averbuch in view of deTorbal and further in view of U.S. Patent application publication 2002/0160773 (filed Mar. 28, 2002) by Gresham (hereinafter “Gresham”).
- E. Claim 12 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Averbuch in view of deTorbal and further in view of U.S. Patent 6,243,575 (filed Aug. 25, 1998, issued Jun. 5, 2001) to Ohyama et al. (hereinafter “Ohyama”).
- F. Claims 14 – 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Averbuch in view of deTorbal and further in view of Noll.

### III. ARGUMENT

For the sake of brevity, the arguments in this brief do not repeat the arguments presented in the Appeal Brief. Instead, this Reply Brief addresses specific assertions and issues raised by the Examiner’s Answer and reiterates that the Appellee has not established a *prima facie* case of obviousness of the rejected claims.

#### A. Claim 1

The Appellant, in the Appeal Brief, asserted that the Appellee has not considered claim 1 as a whole and this has resulted in the selection of a primary reference that does not provide a proper foundation for the obviousness rejection of claim 1. Appellant’s Brief, pages 6 – 7. In response, the Appellee asserts that Appellant attacks the references individually and such arguments cannot show nonobviousness. Reply Brief, page 16. First, it must be noted that it is the Appellee’s burden to show obviousness, not Appellant’s burden to show non-obviousness. M.P.E.P. § 2142; *In re Peehs*, 612 F.2d 1287, 204 USPQ 835, 837 (CCPA 1980). Second, the Appellant does not improperly attack the references individually

as the Appellee suggests. Instead, the Appellant refutes the Appellee's assertions regarding the references.

To show obviousness, the Appellee must provide "some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1742 (2007) (emphasis added). The Appellee's assertions in the Office Actions and Reply Brief, with regard to the references' teachings do not provide the required reasoning with rational underpinning to support the legal conclusion of obviousness.

Specifically, in the Reply Brief, the Appellee maintains that the primary reference teaches the steps of an invention, which uses devices in particular ways, yet the Appellee concedes that primary reference does not teach the devices: "Averbuch did not teach expressly first and second station of a wireless switch." Examiner's Answer, page 15. Having conceded this deficiency, the Appellee essentially rewrites claim 1 by ignoring the requirement of a second station of a wireless switch from the claim and then asserts Averbuch reads on the rewritten limitation:

associating the station of said wireless switch with said second access point (The stationary system controller 101 then conveys the resource allocations to the mobile system controller 200 via a control channel (e.g. 170 and 171) . . . Therefore, the phrase "resource allocations to the mobile system controller 200 via a control channel (e.g. 170 and 171)" **reads on associating the station of said wireless switch with said second access point.**

Examiner's Answer, pages 14 – 15 (bolding added). Whether Averbuch reads on associating the station (*i.e.*, Appellee's asserted first station) of said wireless switch with said access point is not the pertinent issue. The pertinent issue is whether Averbuch reads on "associating a second station of said wireless switch with said second access point . . . ." Averbuch does not teach this and other steps requiring the use of the first and second stations in particular ways because, as the Appellee concedes, Averbuch does not teach a second station. In sum, the Appellee has not established a *prima facie* case of obviousness of claim 1.

## B. Claim 9

The Appellee relies on deTorbal for teaching a wireless switch with first and second stations. Examiner's Answer, pages 17 – 18. In the Appeal Brief, Appellant asserted that deTorbal does not teach a wireless switch and, further, cited portions of deTorbal that explicitly provides deTorbal does not teach a wireless switch. In response, the Appellee states that OBRU controller 48 is read as a wireless switch because it “implements traditional mobile radio functions as well as the functions associated with handover monitoring, notification and preparation.” Examiner's Answer, pages 17 – 18. The Appellant submits that one skilled in the art would not read OBRU controller 48 as meeting the wireless switch required by claim 9.

Notably, the complete sentence of deTorbal from which The Appellee cites provides: “The OBRU controller 48 implements traditional mobile radio functions as well as the functions associated with handover monitoring, notification, and preparation in accordance with the present invention.” Paragraph [0024] (emphasis added). The invention as disclosed by deTorbal provides that “The on-board radio unit 26 [which comprises OBRU controller 48] does not control or become involved in the normal communications between the mobile radios 28 and the cellular network.” Paragraph [0025]; Fig. 2 (showing OBRU 48 as part of on-board unit 26). Moreover, the handover monitoring that the invention requires the OBRU controller to carry out merely involves functions such as storing the planned route, maintaining a list of active connections, keeping track of the location of the train and detecting the speed and direction of the train. Paragraph [0026]. deTorbal provides further:

From this information, the OBRU controller 48 determines the location of the vehicle relative to a current serving base station A and an upcoming target handover base station B along the planned route. When the determined location of the vehicle is a certain distance and/or time from the target base station B, the handover preparation controller 50 formulates and sends a handover preparation notification message to the target base station B . . . target radio based station B can reserve or otherwise make ready whatever data processing and radio resources are needed to effect the group handover and thereby minimize the chances of a dropped connection.

Paragraphs [0026] – [0028] (emphasis added). These portions of deTorbal show that the OBRU controller provides information to the base station and, in turn, the base station effects

the handover. Because the OBRU does not take part in the handover or the communications between the mobile radios, the OBRU does not teach a wireless switch that, as required by claim 9, comprises a packet switch controller that routes data between wireless devices and also operable to switch communications between a plurality of stations. In sum, the Appellee has not established a *prima facie* case of obviousness of claim 9.

C. Claim 5

Claim 5 recites, “operating a base station associated with said first access point by tracking movement of said plurality of wireless devices and said wireless switch using a directional antenna.” Appellee concedes that “[n]either Averbuch nor deTorbal teaches a base station associated with a first access point with a directional antenna.” Examiner’s Answer, page 9. Appellee, therefore, relies on Noll for teaching the conceded deficiency of Averbuch and deTorbal. *Id.*, pages 9 & 21 - 22. The Appellee, however, does not show that Noll teaches the complete step of claim 5 that Averbuch and deTorbal fails to teach. Instead, the Appellee asserts: “Noll teaches a base station with a directional antenna.” Examiner’s Answer, page 22.

Here, the Appellee, in simply identifying a reference that teaches a directional antenna instead of teaching the complete claim limitation, has used claim 5 as an instruction manual to improperly pick alleged teachings of limitations and portions of limitations from the applied art and pieced them together in an attempt to render claim 5 obvious. *See Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1 USPQ2d 1593, 1605 (Fed. Cir. 1987), *cert. denied*, 481 U.S. 1052. This use of claim 5 as an instruction manual is impermissible hindsight reconstruction. *See In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992) (quoting *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988) (providing that “It is impermissible to use the claimed invention as an instruction manual or ‘template’ to piece together the teachings of the prior art so that the claimed invention is rendered obvious.”). At least because the Appellee uses improper hindsight in the rejection of claim 5, the Appellee has not established a *prima facie* case of obviousness of claim 5.

## D. Claim 6

Claim 6 recites, “monitoring received signal strengths . . . and switching between said patterns in response to monitoring received signal strengths . . . .” Appellee concedes Averbuch in view of deTorbal does not teach these limitations of claim 6. Reply Brief, pages 9 - 10. Appellee relies on Noll for teaching these limitations. However, in response to the Appellant’s assertion that the Appellee has not shown that Noll teaches the limitation at issue, the Appellee cites to a different portion of Noll. Specifically, the Appellee now points to paragraph [0029] and Figs. 2 – 3 as teaching the limitations of claim 6 at issue. Paragraph [0029] provides:

In addition to providing concurrent communications with multiple repeaters on a single backhaul frequency, the arrangement in FIG. 2 can also be used to concurrently permit groundlink communications on the same frequency between a base station 102 and a mobile communication unit 106. Groundlink communications with a mobile transceiver unit 106 can be switched from one antenna element to another as the mobile communication unit 106 moves from a region covered by one antenna element to a region covered by another antenna element.

Based on this disclosure and Figs. 2 – 3, the Appellee concludes, “switching is preformed based on monitoring signal strength . . . .” Reply Brief, page 22. The Appellant submits that this conclusion is not supported by Noll, paragraph [0029] and Figs. 2 and 3. As such, the Appellee has not established a *prima facie* case of obviousness of claim 6.

## E. Claims 15 and 16

Claims 15 and 16 require that “said controller of said base station monitors signal strengths received from said wireless switch by a plurality of patterns of discrete antenna elements of said directional antenna.” Similar to the rejection of claim 6, the Appellee, in the Examiner’s Answer has changed the portions of Noll being relied on, namely, Noll paragraph [0029], 102 in Fig. 1 and Figure 2 are now relied on for teaching the limitations of claims 15 and 16. However, the Appellant has not been able to identify item 102 in Fig. 1. If the Appellee meant to refer to Fig. 4, item 102, the Appellant notes that Fig. 4, item 102 is a step to “Determine position, speed, and direction of vehicle”. The Appellant submits that this step and the other cited portions of Noll do not teach the limitations of claims 15 and 16 at issue.

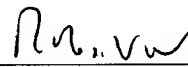
As such, the Appellee has not established a *prima facie* case of obviousness of claims 15 and 16.

#### IV. CONCLUSION

Further to the discussion above and Appellant's discussion in the Appeal Brief, Appellant submits that claims 1 – 18 are patentable over the applied references. Therefore, Appellant respectfully requests that the Board overturn the rejections of pending claims 1 – 18.

Dated: February 20, 2009

Respectfully submitted,

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